

NOAA REPORT

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Commerce Department employees, family and friends recite the pledge of allegiance prior to the gold and silver medal awards in the Herbert C. Hoover Building auditorium Sept. 13.

NOAA Employees Awarded DOC Gold and Silver Medals

Nearly 70 NOAA individuals and groups received Department of Commerce gold and silver medals in a ceremony Sept. 13 in the Herbert C. Hoover Building in Washington, D.C.

Gold and silver medals annually recognize extraordinary achievements that support the department's mission.

The following are the joint and individual awards.

Joint organizational gold medal award: the Hydrometeorological Prediction Center, the Southeast River Forecast Center and the Newport, N.C., Wakefield, Va., Raleigh, N.C., and Wilmington, N.C., National Weather Service Forecast Offices for public service or heroism.

Group gold medal award: Gary Matlock. Maria Uitterhoeve. Mariam McCall, Michael Fraser, Sarah McLaughlin, Mark Murray-Brown, Pasquale Scida, and Ronald Rinaldo for customer service.

Individual gold medal awards: Bruce Parker and Rear Adm. Evelyn Fields for leadership, and Dennis K. Clark, Petrus Tans and Tilden Meyers for scientific/engineering achievement.

Organizational silver medal awards: the NOAA Finance Office for personal and professional excellence, the Space Environment Center for customer service and the Paducah, Ky., Corpus Christi, Tex., Fort Worth, Tex., Tallahassee, Fla., National Weather Service continued on page 8

NOAA-16 Weather **Satellite** Launched

-By Patricia Viets new NOAA satellite that will improve weather forecasting and monitor environmental events around the world soared into space on an Air Force Titan II missile Sept. 21 during a picture-perfect launch from Vandenberg Air Force Base, Calif.

NOAA-16, called NOAA-L before achieving orbit, is the second in a series of five polarorbiting satellites with improved continued on page 2



A Titan II rocket carrying the NOAA-L satellite blasts off from Vandenberg Air Force Base, Calif., Sept. 21.



NOAA-16

continued from page 1 imaging and sounding capabilities that will operate over the next 12 years.

As of the end of September, checkout of the spacecraft and activation of its advanced very high resolution radiometer, advanced microwave sounding unit, search and rescue repeater and search and rescue processor were proceeding smoothly.

"We're extremely pleased with the success of the launch and look forward to a successful mission for NOAA-16," said Greg Withee, assistant administrator for satellite and information services. "Congratulations are due to the entire NOAA, NASA, Air Force and contractor team for the NOAA-16 success," he said.

Like other NOAA satellites, NOAA-16 will collect meteorological data and transmit the information to users around the world to enhance weather forecasting. In the United States, the data will be used primarily by the National Weather Service for long-range weather and climate forecasts.

The satellite will continue to support the international COSPAS-SARSAT system by providing search and rescue capabilities essential for detection and location of ships, aircraft and individuals in distress.

NOAA-16 was built by Lockheed Martin Space Systems Co. of Sunnyvale, Calif., and launched for NOAA under technical guidance and project management by NASA's Goddard Space Flight Center.

NASA turned operational control of the NOAA-16 spacecraft over to NOAA 10 days after launch. NASA's comprehensive onorbit verification period is expected to last until approximately 45 days after launch.

Officials Commemorate Deadliest Natural Disaster

—By Ron Trumbla

NOAA Administrator D. James Baker peered over his shoulder and hurried his remarks as an ominous squall line raced toward Galveston, Tex.

Standing atop the historic island city's 17-foot-high sea wall, Baker warned citizens not to become complacent about hurricanes. He reminded them that a major hurricane could still inflict extensive property damage and serious loss of life.

"We really fear that a major storm could hit a major population center and could lead to major loss of life if people don't respond to it," he said. "Hurricanes don't happen often, but when they do, you have to listen to the warnings."

Baker and National Weather Service southern region director Bill Proenza were among the dignitaries gathered in Galveston to commemorate the 100th anniversary of the deadliest natural disaster in the history of the United States.

On Sept. 8, 1900, the great Galveston hurricane roared through the city with winds in excess of 130 miles per hour and a 15-foot storm surge. When its fury finally abated, at least 3,500 homes and buildings were destroyed and more than 8,000 people were killed.

"That hurricane left the city totally devastated," said Proenza.
"The number of people who lost their lives on that single day represents more than the combined fatalities resulting from the 325 tropical storms and hurricanes that have struck the United States since continued on page 7



Curtis Carey/NOAA

Administrator D. James Baker addresses Galveston, Tex., residents during the dedication of a 12-foot statue memorializing the more than 8,000 people killed by a hurricane that hit the city Sept. 8, 1900, and celebrating the heroic efforts of the survivors who rebuilt Galveston.

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Laura Francis/NOAA

Geographic Alliance students and Florida Keys National Marine Sanctuary educator lvy Kelley examine plankton collected at sea as part of the Coral Reef Classroom program.

Fla. Keys Marine Sanctuary Hosts Coral Reef Classroom

By Laura Francis
Courteen teachers and eighteen elementary and middle school students from Miami, Baltimore, Chicago and Washington, D.C., had a firsthand view of the natural treasures of the Florida Keys

National Marine Sanctuary during a special three-day field trip Sept.

14-17 that was part of the Sustainable Seas Expeditions.

Teachers in the group are part of the National Geographic Society's Geography Alliance Urban Initiative, which is designed to build a cadre of teachers from minority groups in urban areas that are committed to professional development and enhancing learning opportunities for students.

The teachers chose students with a special interest in the oceans to participate in this program.

The group's first activities in the

sanctuary were an afternoon swim test and a snorkeling lesson. Half of the students had never been swimming in waters other than a lake or a pool, and for many this was their first time seeing the ocean.

Bryan Arias of Harriet Tubman Elementary School in Washington said, "I think that if we never came here, some of us might never have snorkeled in our entire lives."

During the first evening, Ivy Kelley, program coordinator for the Coral Reef Classroom, provided an orientation about the location and importance of the Florida Keys National Marine Sanctuary and prepared the group for what they were to experience over the next couple of days. She also emphasized the value of the coral reef ecosystem to the Florida Keys continued on page 7

Tom Johnson: Team Player

—By Dane Konop

This is the tenth and last in a series of profiles of men and women who were NOAA employees since NOAA was established in 1970.

Tom Johnson was reluctant to be profiled. It's not that he didn't have a successful career in the federal government; he did, rising from a GS-7 to a GS-15 in a little over 15 years. But he is a modest man who does not share the details of his life easily, even with a writer he's known for 20 years.

In his nearly 40-year federal career, Johnson was in the forefront of the computer revolution in the government and worked on a number of important tasks, including the development and deployment of the Automated Surface Observing System, one of the cornerstones of the modern Weather Service.

But like most careers, his had hit some bumps, including a reduction in force that cost him that hard-earned 15. He got over it, he says, and he's happy with his years with the government. He wanted to be truthful and just didn't want to sound like he was complaining about any of it.

As the details of his NOAA career begin to emerge, he concedes, "I don't know why you're getting it out of me. But I guess the truth would be beneficial for someone."

Tom Johnson has always been a team player. You do your best, regardless of your role on the team, and you don't complain about how a contest turns out.

In high school in the late 1950s in racially segregated Columbia, S.C., Johnson was a quarterback on continued on page 6

Focus On...



Wilfred von Dauster/NOAA

Students from Boulder, Colo., take environmental measurements at the Forecast Systems Laboratory's GLOBE booth. In the GLOBE Program students in schools around the world take scientific measurements and report them on the World Wide Web.



Wilfred von Dauster/NOA

Students swarm into the lobby of the David Skaggs Research Center in Boulder.

The Boulder Science Festival

By Barbara McGehan or two days in September, large, enthusiastic crowds of students and adults visited NOAA's David Skaggs Research Center in Boulder, Colo., making the NOAA science festival a huge success.

About 2,000 middle school students attended the festival on Friday, Sept. 16, and almost 1,000 members of the community attended on Saturday.

Several scientists at the festival commented on the enthusiasm and interest on the part of the public. The students and adults asked terrific questions, they said, and the NOAA scientists were able to communicate our science to them.

Questions ranged from "What exactly are ozone depletion and the ozone hole?" to "What is the color of the sky at night?" to "Who is Igor (the name Boulder forecasters dubbed the computer voice on NOAA weather radio)?".

"We had great help from all of our employees and their families, our support staff, scientists and others who volunteered," said Carol Knight, organizer of the event. At least 250 people helped with the festival.

More than 47 exhibits and 22 presentations took place under tents and within the building. continued on page 5

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Face Painting, Balloons, Earthquakes and Tsunamis

continued from page 4

Face painting was a big hit with the younger folks, as were the balloons. All ages liked "oobleck," a gooey, green substance that seemed to change moment by moment from a solid to a liquid.

Presentations on earthquakes and tsunamis by the National Geophysical Data Center, weather balloon launches, tours of the National Weather Service office and a multimedia presentation on the northern lights by the Space Environment Center were among the many highlights.

Beverly Meier, an eighth grade teacher at Broomfield Heights Middle School, said her students had a very positive experience.

"The response from everyone was just outstanding. There was so much going on and the atmosphere of the festival was so exciting that it made it a great experience for everyone," Meier said. "It was very well organized and everyone was so friendly, helpful and informative. The kids are still talking about it and I see some obvious spillover in that when they have to look something up on the Internet, they go to the NOAA Web site first."

Meier said there were so many parents that wanted to come with the students that they ended up with a parent for every five students.

Is science fun? As one middle school student put it as he walked around, "This is a really cool place!"



Lt. (j.g.) Pauline Roberts of the Climate Monitoring and Diagnostics Laboratory shows students instruments used to measure ozone at the South Pole.



Wilfred von Dauster/NOAA Researchers from the Climate Diagnostics Center help students take simulated sediment samples, which can provide clues to past climate conditions.

Johnson

continued from page 3 the black state championship football team. "I wasn't a starter. I was second string," he's quick to add. "But I lettered."

Johnson was good enough to play college ball, switching to half back at Moorehouse College in Atlanta, Ga. He also was on scholarship, but not for football and it wasn't guaranteed.

"It was a semester's payment every time you made the dean's list," he says. He stayed on the list until his last semester, when his schedule "got more rigorous."

A math major in college, Johnson says, "I was going to minor in physics or engineering, but in the middle of my junior year I found that it would take an extra semester or a year to complete a minor in chemistry or physics. So I went into education as my minor."

Just before graduating, Johnson was recruited to teach and coach football at Crispus Attucks High School in Broward County, Fla. After two years, he left to attend graduate school at Atlanta University. He now says, "Although teaching wasn't my first choice, it was the most rewarding occupation I ever had."

During a field trip while getting his masters in math, he was part of a group that toured the Atomic Energy Commission in Oak Ridge, Tenn. "We were introduced to the large-scale computer system they were using then," Johnson says. "I was fascinated—tape drives moving and a guy sitting at a console. It was an IBM 70-94, one of their first big machines, a computer room maybe the size of a quarter block!" He says the system had about the same computing power as a modern laptop.

Johnson had taken the civil service exam. After receiving his

masters, he accepted a job as a mathematician/computer programmer with the Weather Bureau's long-range forecasting office in Suitland, Md.

It was 1962 and John F. Kennedy was president. His administration was recruiting minorities and others from disadvantaged areas like Appalachia.

"There were about five of us who came to Washington on what we called the 'Kennedy Train' to work for the Weather Bureau," Johnson

"If you want to succeed in the federal government, the budget is an area you must get in."—Tom Johnson

recalls. "I spent the first couple of months in a rooming house in Washington, commuting by bus to Suitland every day," he says.

He quickly moved up through the ranks, reaching GS-12 in six years working in progressively more challenging tasks "designed to make the office's computer system more efficient," he says.

In 1968, he took a GS-13 computer specialist job with the Coast and Geodetic Survey's ADP planning branch, eventually working his way up to be its GS-14 chief. Johnson enjoyed leading a team of eight computer specialists, but observed that people were promoted into management positions, himself included, because of their technical expertise and not because of their management skills.

He determined to correct that deficiency, as usual, by getting more education and training.

In 1976, Bob Rollins, the head of the National Ocean Survey's Office of Program Development and Management, had been tapped to attend a mid-level-management, career-enhancement program for a year at Stanford University. Rollins

did not want to go.

Johnson says, "I was called in one day and asked if I'd be interested in attending. I said immediately, 'yes!' I didn't even take 15 seconds to think about it. And then I came home and told my family that I was headed for California. I saw it as an opportunity to get away and reassess where I was in my career."

With the blessings of his family, who stayed behind in Maryland, Johnson spent a year at the Center for Technology Assessment Policy, finishing his studies in August 1977.

When he returned, Johnson moved to a prestigious office on the top floor in the NOS headquarters building in Rockville, Md., reporting directly to Rollins as a GS-14 program analyst and carrying out a number of management studies.

After about a year, Johnson was selected to be one of the first NOAA employees to participate in the candidate development program for the newly created Senior Executive Service. But after two years of rotating assignments in a variety of management positions, including the budget office and congressional affairs, Johnson was not selected for the SES.

"I was the only one in NOAA who completed that training," Johnson says. "But the selection process did not adhere to the government qualifications for SESers. SESers are supposed to be chosen across agency lines as opposed to by one's agency. And it was all for naught, at least as for going into the SES. But the training was worth it. The object was to become a better manager, not necessarily an SESer," Johnson says.

Most importantly for Johnson, he had begun to learn something about the budget process. "If you want to succeed in the federal government," Johnson says, "the continued on page 8

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Coral Reef Class

continued from page 3 and showed them some images of marine life they might encounter on their trip to the sanctuary.

"What a fabulous group! Their high spirits and curiosity let me see our sanctuary through new eyes and their questions challenged me to learn even more about our unique local environment. This trip underscored the importance of field experiences for students and teachers," Kelley said.

The next day, the group divided their time between the Coral Reef Classroom with Ivy Kelley and the Keys Marine Lab with Nancy Diersing, education specialist at the sanctuary.

During the classroom session, students collected data at sampling stations and used scientific equipment to measure important water quality parameters such as visibility, dissolved oxygen and salinity.

"We recorded various observations about the ocean, such as turbidity, salinity, and cloud cover. We used scientific instruments such as the secchi disk and refractometer to help us make these observations," said Mackenzie VanCamp from the Palombi School in Chicago.

The highlight of the day for many was the opportunity to snorkel at Alligator Reef, named for the *U.S.S. Alligator*, which sank in the area, not the sharp-toothed reptile.

"What an amazing feeling it was to jump off that boat and go plunging into the salty water," said LaToya Bundel of Southwood Middle School in Chicago.

Her classmate, Mercedes Laney, echoed LaToya's enthusiasm. "This was my first time ever snorkeling and was by far the most exciting part of the entire program," Mercedes said. "I was able to see first hand all the under water plant

life and sea life that were discussed in this classroom."

At the Keys Marine Lab, Diersing provided students with a close-up view of some other types of Keys marine life, including the queen conch, a mollusk with a beautiful pink shell that was once plentiful in Keys waters and is now being raised at the lab. She also provided students with the opportunity to see and touch horseshoe crabs, sea urchins and spiny lobsters.

"Working with this group was a rewarding experience that I will never forget," Diersing said. "Being able to share the marine world with such special people reminded me that education is the key to opening new doors for people and changing their lives."

On the third day, the group traveled to Key West to tour the NOAA Ship *Gordon Gunter* and meet and interact with Commerce Secretary Norman Mineta and NOAA Administrator D. James Baker

Baker and Mineta talked with the students, asked them about their experiences in the Keys and quizzed them about the importance of coral reefs and what they can do to protect these important ecosystems.

Both emphasized the importance of education and programs like the Coral Reef Classroom that introduce students to the ocean and cultivate a curiosity for leaning more about our blue planet.

Jamila Floyd of Neval Thomas Elementary School, Washington, D.C., summed up her experience. "I did many things these two days," she said, "but the most important thing I learned is that the sea is just like the land and we need to protect, explore, and learn more about the plants and animals. I will always remember the experience and will share what I learned with my classmates."

Deadliest Disaster

continued from page 2 then. In fact, that single event accounts for one third of all tropical storm or hurricane-related fatalities that have occurred in this nation since it was founded."

Baker also joined U.S. Senator Kay Bailey Hutchison, CBS Evening News anchor Dan Rather and more than a thousand Galvestonians in a moving tribute to those who lost their lives in the hurricane and to the heroic actions of many of the survivors.

One of those heroes was Issac M. Cline, Galveston's Weather Bureau manager in 1900. The Weather Bureau received early reports that a hurricane had passed over Cuba and was heading north. Appropriate warnings were issued. But without wireless ship-to-shore communications, Cline and the bureau had no way of knowing the hurricane was getting stronger and was now heading toward Texas.

Nevertheless, Cline became increasingly suspicious of the weather and raised the hurricane warning flags atop the Weather Bureau building on Sept. 7, the day before the hurricane made landfall. He spent the rest of that day and the morning of Sept. 8 patrolling the beach and warning people to get to higher ground.

Despite the horrendous loss of life, including Cline's wife, many more people might have died without his warnings.

Today, the Issac M. Cline Award is given to outstanding employees who excel in delivering the products and services of the National Weather Service.

In a side visit to the Houston NWS forecast office, Baker presented Cline awards to Gene Hafele for leadership, Lance Wood for meteorology, Charles Roeseler for hydrology and Steve Allen for program management.

Johnson

continued from page 6 budget is an area you must get in."

He had learned that lesson well working for Rollins, who was a budget person. "When you control the budget, you control the organization," Johnson says.

In 1982, a year into the Reagan Administration, Johnson was selected by Rollins to be acting chief of the Scientific Services Division, which among other offices was facing a reduction in force.

Johnson remembers, "I was an operations research analyst, working as a GS-15. I was called in the office one day and was told that I would fare better, because of the RIF, in another job series. And I said, 'okay.' The paperwork was cut and I was placed in a program analyst position. Then the RIF came along, and that was one of the positions that was affected." The position he left was not affected by the RIF.

Johnson says, matter-of-factly, I had gotten to a GS-15 with the help of the individual that could take it away."

He was demoted to a GS-13. He was disappointed, but says he had no complaints. He just picked himself up and moved on. "It was a survivable action," he says.

Johnson moved to the NOS Office of Marine Operations, working on management studies for Rear Adm. Robert Munson.

In 1983, Johnson got a promotion and moved to the Systems Acquisition Office to be a program control manager for the team developing the new Automated Surface Observing System.

"We were just getting off the ground. I was in on the early planning stages of the program. I participated in the planning and documentation of the monitoring and control system. I developed a little system that would track the purchase, installation and operation of more than 100 National Weather Service systems and maybe 700 FAA systems and 100 or so for the Navy," he says.

Johnson says his ASOS job drew on all the talents and skills he had been developing his entire career.

Unbeknownst to anyone else, Johnson was working on an automated system for tracking ASOS progress that was based on a desktop computer. He didn't reveal his hand until there was a need for the information. When there was, "I had a system all ready to go," he says. "I had anticipated that they would need certain information about ASOS. So when the time came, I had a system prepared to identify when materials were purchased, when the pre-installation activities were started, that type of thing—costs, installation, checkout and operations."

As program control manager, Johnson kept track of all the details needed to field the system.

"The last system was installed about October 1999," he says.

With his work on ASOS complete, Johnson decided to retire after 37 years with the federal government and 30 with NOAA.

A longtime golfer, Johnson expected to play often in retirement, but he hasn't played more than twice in the past nine months. Something else has recaptured his interest.

The day he interviewed for this profile, Johnson got a notice in the mail. He happily reported, "I just received today a statement from the Prince Georges County (Md.) school board that I have been tentatively accepted as a substitute teacher."

For Tom Johnson, life has come full circle. For the students and teachers in P.G. County, a new leader is joining their team.

Awards

continued from page 1 Forecast Offices for public service or heroism.

Group silver medal awards: Lans Rothfusz and Steven Piltz for leadership; William Conner, Linda Burlington, Curtis Carlson, Robert Ransom, James Hudson, Douglas Helton, William Goodwin, Robert McNamara, Jr., and Nancy Daschbach for leadership; Garry Mayer, James Burgess, Christopher Doley, Robin Bruckner, John Catena, Eric Hutchins, Victor Koski and Richard Wantuck for leadership; Allen Hittelman, Britt Bassett, Kent Groninger, Jerry Janssen and David Groton for scientific/engineering achievement; Timothy Schmit, Jamie Daniels and Antonio Irving for scientific and engineering achievement; Cdr. Steven Barnum, Lt. Cdr. Gerd Glang, Lt. Cdr. Emily Christman, David Feit, James Hoke and Cdr. Samuel DeBow for public service or heroism; Russell Pfost, Alan Gerard, Michael Ryan, Patricia Peden and Tice Wagner for employee development.

Individual silver medal awards: James McVey for leadership, Gregory Matzen for customer service and Donald Blersch for leadership. ⊗

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